





GENERAL PROJECT NOTES:

1.

CONTRACTOR IS RESPONSIBLE FOR ERECTING TEMPORARY BARRICADES AND/OR FENCING TO PROTECT THE SAFETY OF THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BARRIERS AND REPAIR ALL DAMAGE TO PROPERTY ON THE SITE CAUSED BY THIS CONSTRUCTION. THE COST OF REPAIR IS THE CONTRACTOR'S RESPONSIBILITY. (IF COMPOUND FENCE DOES NOT EXIST)
2.

ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
3.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
4.

EXCESS SOIL MATERIAL AND DEBRIS CAUSED BY THIS CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
5.

CONTRACTOR SHALL MAKE ADJUSTMENTS TO GRADING ELEVATIONS AS NECESSARY TO ENSURE A SITE FREE OF DRAINAGE PROBLEMS.
6.

CONTRACTOR SHALL COORDINATE A CONSTRUCTION LAYDOWN AREA WITH THE PROPERTY OWNER. CONSTRUCTION LAYDOWN AREA SHALL BE FENCED-IN WITH TEMPORARY (45 DAY) CONSTRUCTION FENCE. THE TEMPORARY FENCE SHALL BE CONSTRUCTED OF 6' HIGH CHAIN LINK FABRIC AND IS TO BE REMOVED AT THE END OF CONSTRUCTION. LAYDOWN AREA IS TO BE RESTORED TO ITS ORIGINAL CONDITION AFTER FENCE REMOVAL. (IF COMPOUND FENCE DOES NOT EXIST)
7.

SURVEY INFORMATION SHOWN WAS CREATED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY. (IF PROVIDED)
8.

THESE PLANS DO NOT ADDRESS THE SAFETY AND STABILITY OF THE STRUCTURE DURING ASSEMBLY AND ERECTION, WHICH ARE THE RESPONSIBILITY OF THE ERECTOR, BASED ON THE MEANS AND METHODS CHOSEN BY THE ERECTOR.
9.

CONTRACTOR SHALL KEEP VERIZON WIRELESS "NO SERVICE," TO A MINIMUM DURING THE MAINTENANCE WINDOW SCHEDULE FOR THE NEW ANTENNA MODIFICATIONS.

GENERAL CONTRACTOR NOTES:

1.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE PROJECT SCOPE OF WORK DEFINED UNDER THE REQUEST FOR PROPOSAL (RFP) FOR THIS PROJECT AND ALL ASSOCIATED ATTACHMENTS AND DOCUMENTS PROVIDED.

THE RFP AND ALL ASSOCIATED DOCUMENTS SHALL DEFINE THE COMPLETE PROJECT SCOPE OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL DOCUMENTS AND IS SOLELY RESPONSIBLE FOR ALL WORK.

ALL DOCUMENTS INCLUDED WITHIN THE PROJECT REQUEST FOR PROPOSAL ARE REQUIRED FOR THE COMPLETE PROJECT SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK (EQUIPMENT, MATERIAL, INSTALLATION, TESTING, ETC.) INDICATED IN ALL DOCUMENTS. THE RFP, VERIZON WIRELESS NETWORK STANDARDS AND PROJECT ADDENDUMS AND CLARIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. THE FORMAT OF THE SPECIFICATIONS AND DRAWING NUMBERING PER DISCIPLINE IS NOT INTENDED TO IMPLY SEGREGATION OF SUB CONTRACTOR WORK. CONTRACTOR SHALL ASSIGN ALL SUB CONTRACTOR WORK AND VERIZON WIRELESS WILL NOT ACCEPT ANY CHANGE ORDERS FOR INTERNAL CONTRACTOR WORK ASSIGNMENTS.

CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING ALL RFP DOCUMENTS TO THEIR SUB CONTRACTORS. ALL RFP DOCUMENTS ARE REQUIRED TO INDICATE THE PROJECT SCOPE OF WORK. PARTIAL SUB CONTRACTOR DOCUMENT PACKAGES ARE HIGHLY DISCOURAGED.

IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, REFERENCED STANDARDS, VERIZON WIRELESS STANDARDS, OR AGREEMENT TERMS AND CONDITIONS THE ARCHITECT/ ENGINEER SHALL BE CONTACTED FOR FORMAL INTERPRETATION OF THE REQUIREMENTS. THE CONTRACTOR SHALL BE DEEMED TO HAVE PROVIDED THE DETAILED AND EXTENSIVE INTERPRETATION. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECT/ ENGINEER INTERPRETATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO VERIZON WIRELESS.

ANTENNA, MOUNTS & HARDWARE INSTALLATION NOTES:

1.

CONTRACTOR TO INSTALL ANTENNAS, MOUNTS AND TOWER HARDWARE PER MANUFACTURER'S RECOMMENDATIONS (OR AS REQUIRED BY THE OWNER/PROVIDER).
2.

ALL BOLTS SHALL BE TIGHTENED PER AISC REQUIREMENTS.
3.

ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED-UP WITH TWO COATS OF COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.
4.

ANTENNA MOUNTS SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO AN APPROVED CLIMBING POINT.
5.

SEE ALSO GENERAL ANTENNA NOTES ON SHEET RF1 (IF APPLICABLE).

STRUCTURAL DESIGN CRITERIA:

ALL LOADS DERIVED FROM REQUIREMENTS OF INTERNATIONAL BUILDING CODE 2009, ASCE 7-05, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" & ANSI TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS".

BUILDING STRUCTURES:

1.

WIND LOADS: IBC 2009 §1609 & ASCE 7-05 §6.4 (SIMPLIFIED METHOD)  
 $V_{3s} = 90 \text{ MPH}$   
OCCUPANCY CAT. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
2.

SEISMIC LOADS: IBC 2009 §1613 & ASCE 7-05 §12.14 (SIMPLIFIED METHOD)  
OCCUPANCY CAT. = II; SITE CLASS = D  
 $V = \frac{F(S_{ps})W}{R}$   
 $F = 1.0$  (SINGLE-STORY), 1.1 (TWO STORY), 1.2 (THREE STORY)  
 $S_{ps} = (2/3) S_{ms}$   
 $R = 1.5$  (ORDINARY PLAIN CONCRETE SHEARWALLS),  
6.5 (LIGHT-FRAMED WALLS W/ WOOD STRUCTURAL PANELS),  
4.0 (ORDINARY REINFORCED CONCRETE SHEARWALLS)

COMMUNICATIONS STRUCTURES:

1.

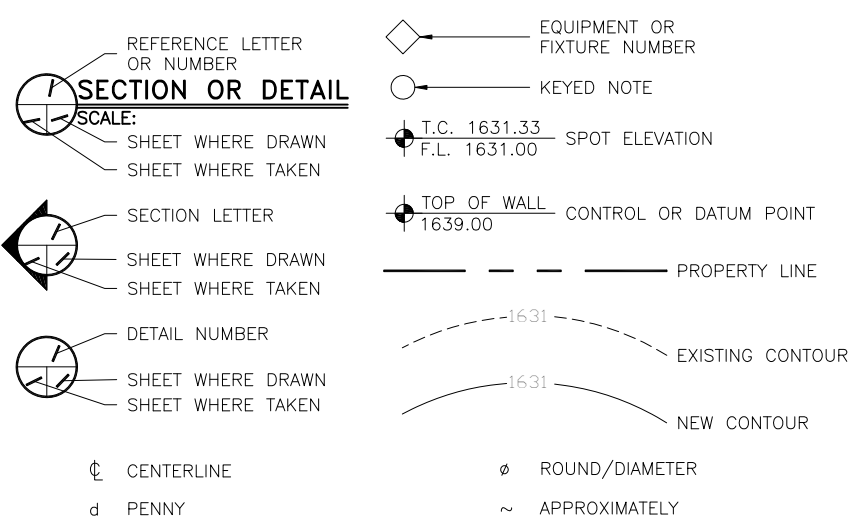
WIND LOADS: IBC 2009 §1609, ASCE 7-05 §6.5.15 & ANSI TIA-222-G  
 $V = 90 \text{ MPH}$  (3-SEC. GUST)  
 $V = 30 \text{ MPH}$  (0" RADIAL ICE)  
STRUCTURE CLASS. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
2.

SEISMIC LOADS\*: IBC 2009 §1613, ASCE 7-05 §15.6.6 & ANSI TIA-222-G  
\*MAY BE IGNORED FOR STRUCTURE CLASS I AND/OR EARTHQUAKE SPECTRAL RESPONSE FOR SHORT PERIOD ( $S_s$ )  $\leq 1.0$   
STRUCT. CLASS. = II; OCC. CAT. = II; SITE CLASS = D; IMPORTANCE FACTOR = 1.0  
 $V = \frac{S_{ds}(W)I}{R}$  (EQUIVALENT LATERAL FORCE PROCEDURE (METHOD 1))  
 $V = \frac{\sum S_{az}(W_z)I}{R}$  (EQUIVALENT MODAL ANALYSIS PROCEDURE (METHOD 2))



VIEW OF EXISTING RANGER STATION/COMMUNICATION CENTER (LOOKING SOUTHEAST)

LEGEND OF SYMBOLS:



VIEW OF EXISTING RANGER STATION/COMMUNICATION CENTER (LOOKING SOUTHWEST)



VIEW OF EXISTING RANGER STATION/COMMUNICATION CENTER (LOOKING NORTH)

DESIGNED FOR:

verizonwireless

2730 BOZEMAN AVE.  
HELENA, MONTANA 59601

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DESIGNED BY:

REV	DESCRIPTION	DATE	CHK	BY
A	PRELIMINARY - FOR LEASING & ZONING	05/28/15	EMS	-
B	REVISED PER COMMENTS	06/03/15	EMS	-

PRELIMINARY  
FOR LEASING/ZONING

PROJECT NAME:

WY1 MOUNT WASHBURN  
PROPOSED 39'-6"  
SELF SUPPORT TOWERS  
EXISTING COMMUNICATIONS SITE

PROJECT ADDRESS:

MOUNT WASHBURN  
YELLOWSTONE NATIONAL PARK  
PARK COUNTY, WYOMING

SHEET TITLE:

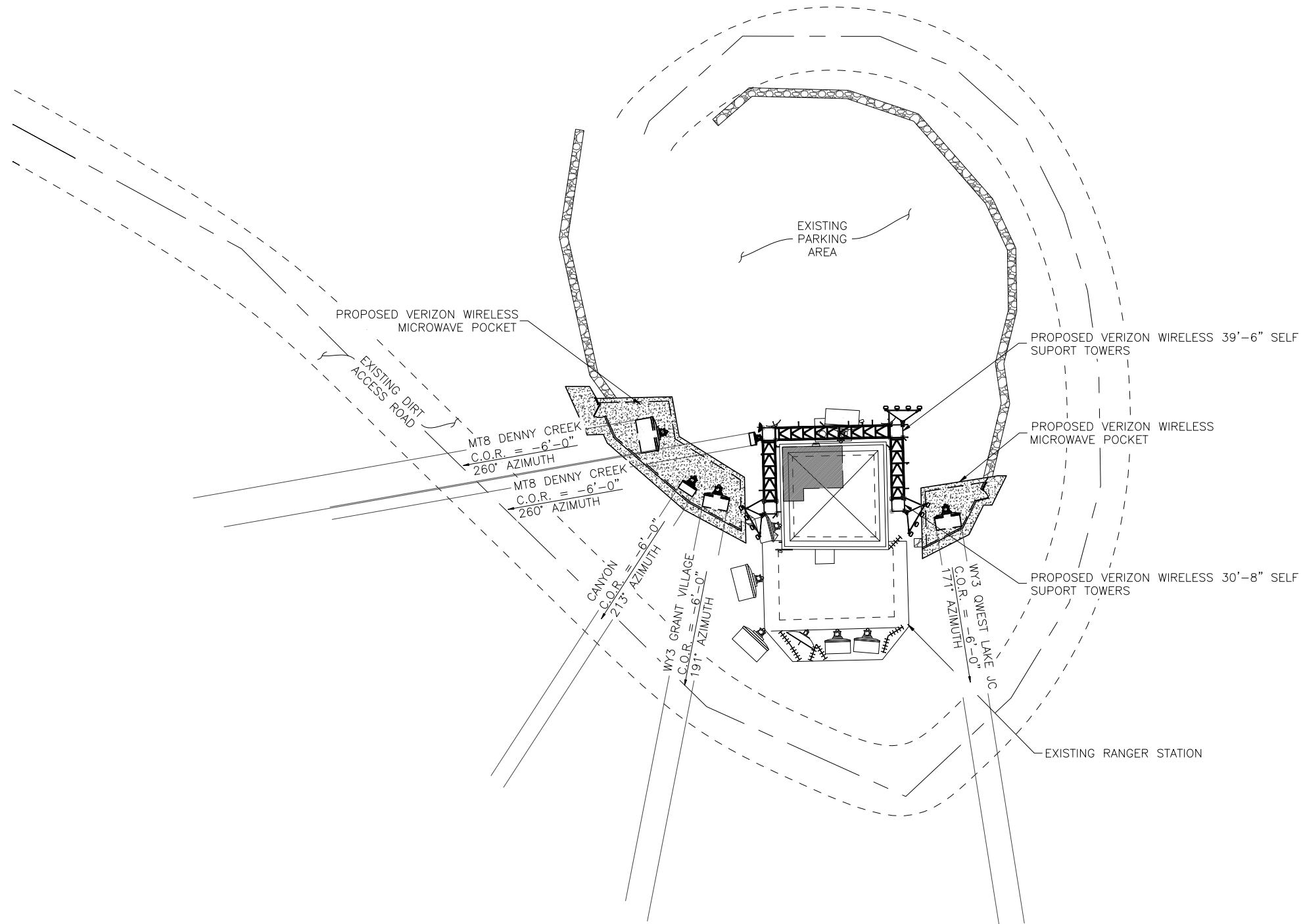
SPECIFICATION &  
PHOTO SHEET

SAVE DATE:

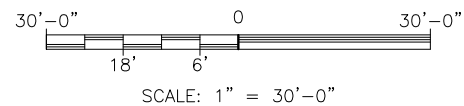
6/3/2015 10:00 AM

SHEET NUMBER:

PS1



**SITE PLAN**




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REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - FOR LEASING & ZONING	05/28/15	EMS	-
B	REVISED PER COMMENTS	06/03/15	EMS	-

**PRELIMINARY  
FOR LEASING/ZONING**

PROJECT NAME:

**WY1 MOUNT WASHBURN**

**PROPOSED 39'-6" SELF SUPPORT TOWERS**

**EXISTING COMMUNICATIONS SITE**

PROJECT ADDRESS:

**MOUNT WASHBURN**

**YELLOWSTONE NATIONAL PARK**

**PARK COUNTY, WYOMING**

SHEET TITLE:

**SITE PLAN**

SAVE DATE:

6/3/2015 10:00 AM

SHEET NUMBER:

**Z1**



- SITE NOTES:
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.

2. WRAP AROUND TOWER & NEW COMPONENTS TO BE GALVANIZED & PAINTED NON-SHINY/REFLECTIVE.

NOTE:

TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.

DESIGNED FOR:

verizonwireless

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HELENA, MONTANA 59601

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A	PRELIMINARY -- FOR LEASING & ZONING	05/28/15	EMS	--
B	REVISED PER COMMENTS	06/03/15	EMS	--

PRELIMINARY  
FOR LEASING/ZONING

PROJECT NAME:

WY1 MOUNT WASHBURN  
PROPOSED 39'-6"  
SELF SUPPORT TOWERS  
EXISTING COMMUNICATIONS SITE

PROJECT ADDRESS:

MOUNT WASHBURN  
YELLOWSTONE NATIONAL PARK  
PARK COUNTY, WYOMING

SHEET TITLE:

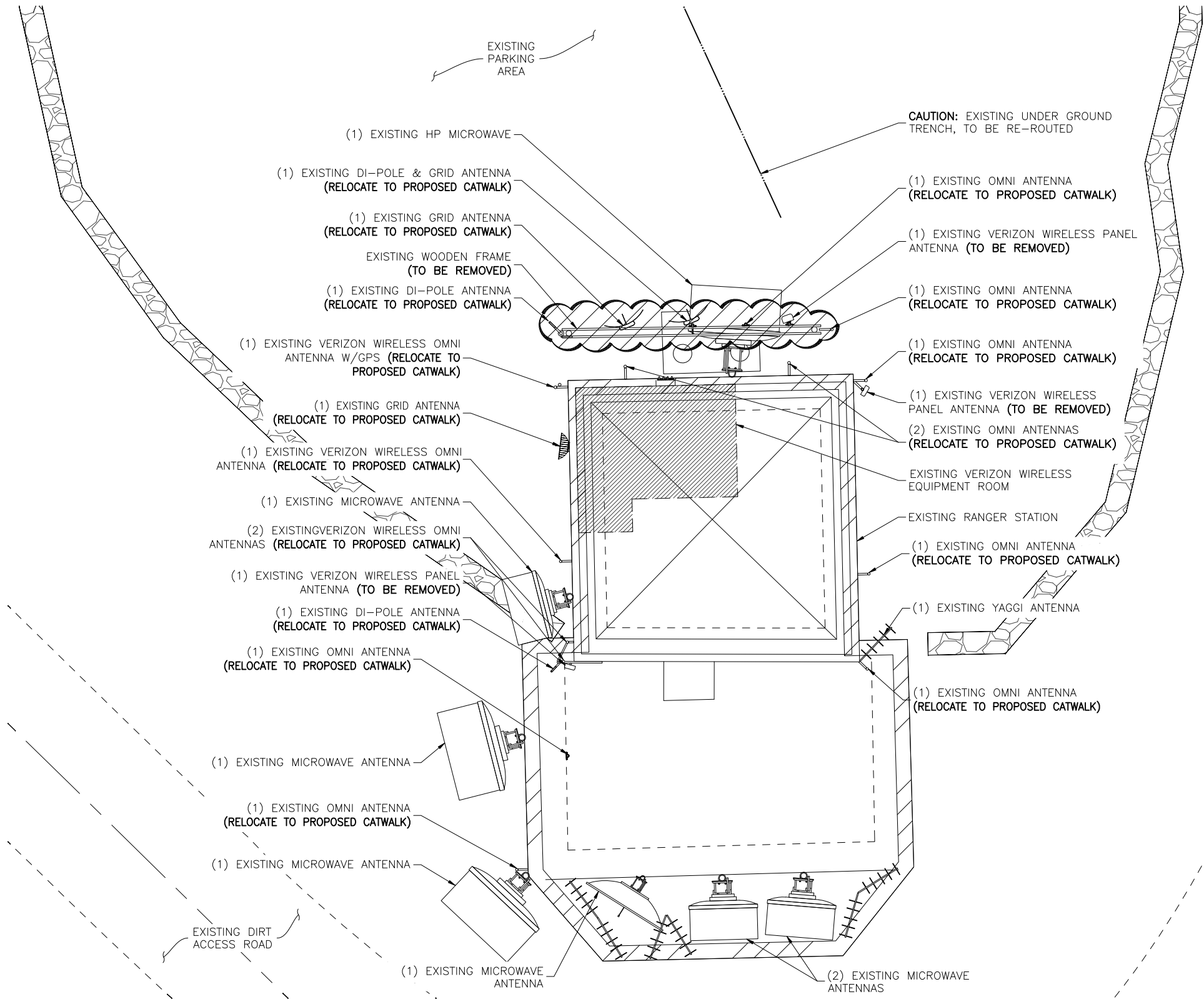
ENLARGED EXISTING  
SITE PLAN

SAVE DATE:

6/3/2015 10:00 AM

SHEET NUMBER:

Z2



ENLARGED EXISTING SITE PLAN

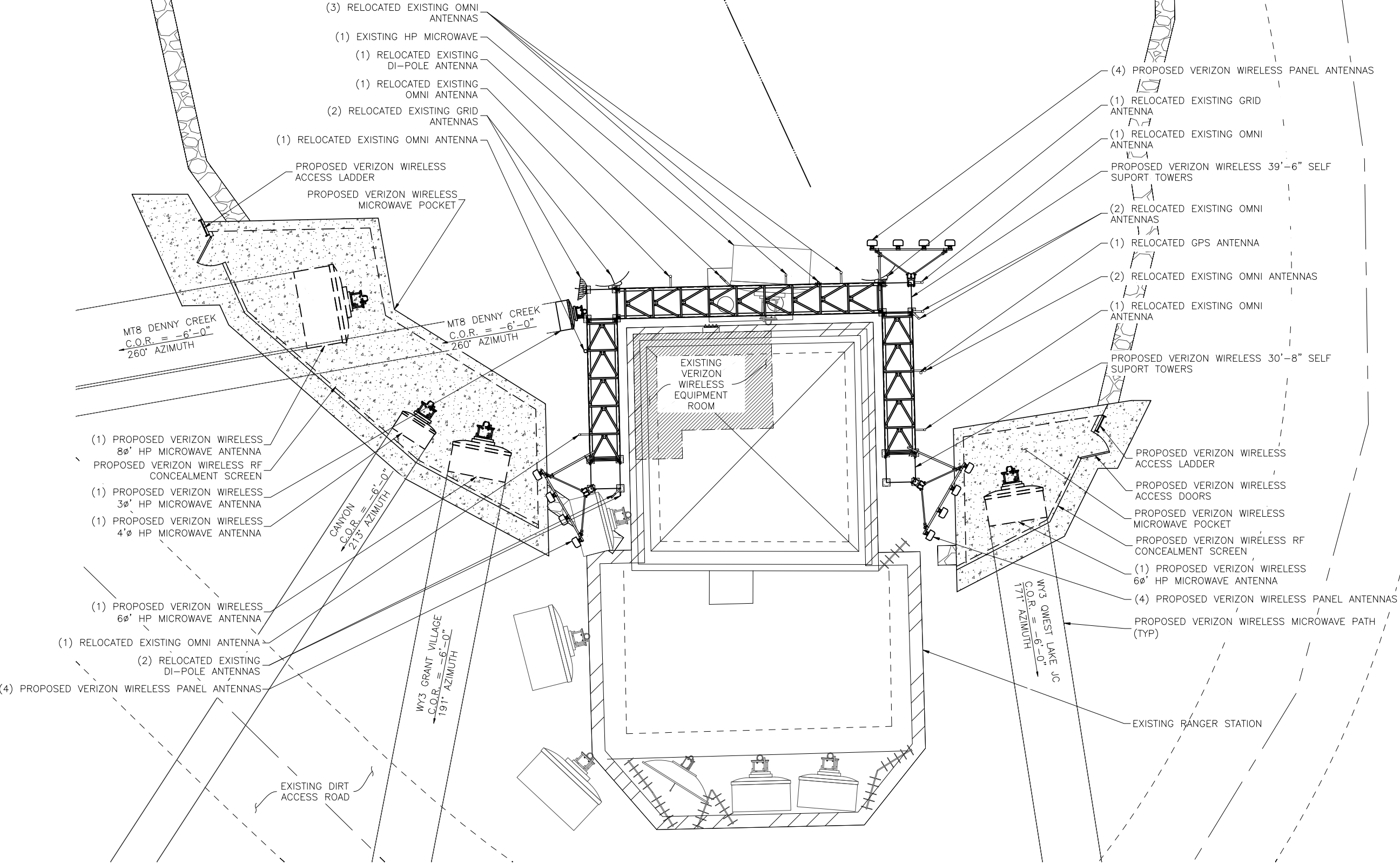


12'-0" 0 12'-0"  
10' 6' 2'  
SCALE: 3/32" = 1'-0"

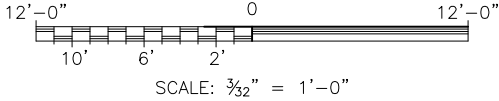
**SITE NOTES:**

- 1 PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.

CAUTION: EXISTING UNDER GROUND TRENCH, TO BE RE-ROUTED



**ENLARGED PROPOSED SITE PLAN**



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B	REVISED PER COMMENTS	06/03/15	EMS	-

PRELIMINARY  
FOR LEASING/ZONING

PROJECT NAME:

**WY1 MOUNT WASHBURN**  
**PROPOSED 39'-6"**  
**SELF SUPPORT TOWERS**  
**EXISTING COMMUNICATIONS SITE**

PROJECT ADDRESS:

**MOUNT WASHBURN**  
**YELLOWSTONE NATIONAL PARK**  
**PARK COUNTY, WYOMING**

SHEET TITLE:

**ENLARGED PROPOSED**  
**SITE PLAN**

SAVE DATE:

6/3/2015 10:00 AM

SHEET NUMBER:

**23**

REMOVAL

- THREE (3) EXISTING PANEL ANTENNAS
- TWO (2) WOOD POLE

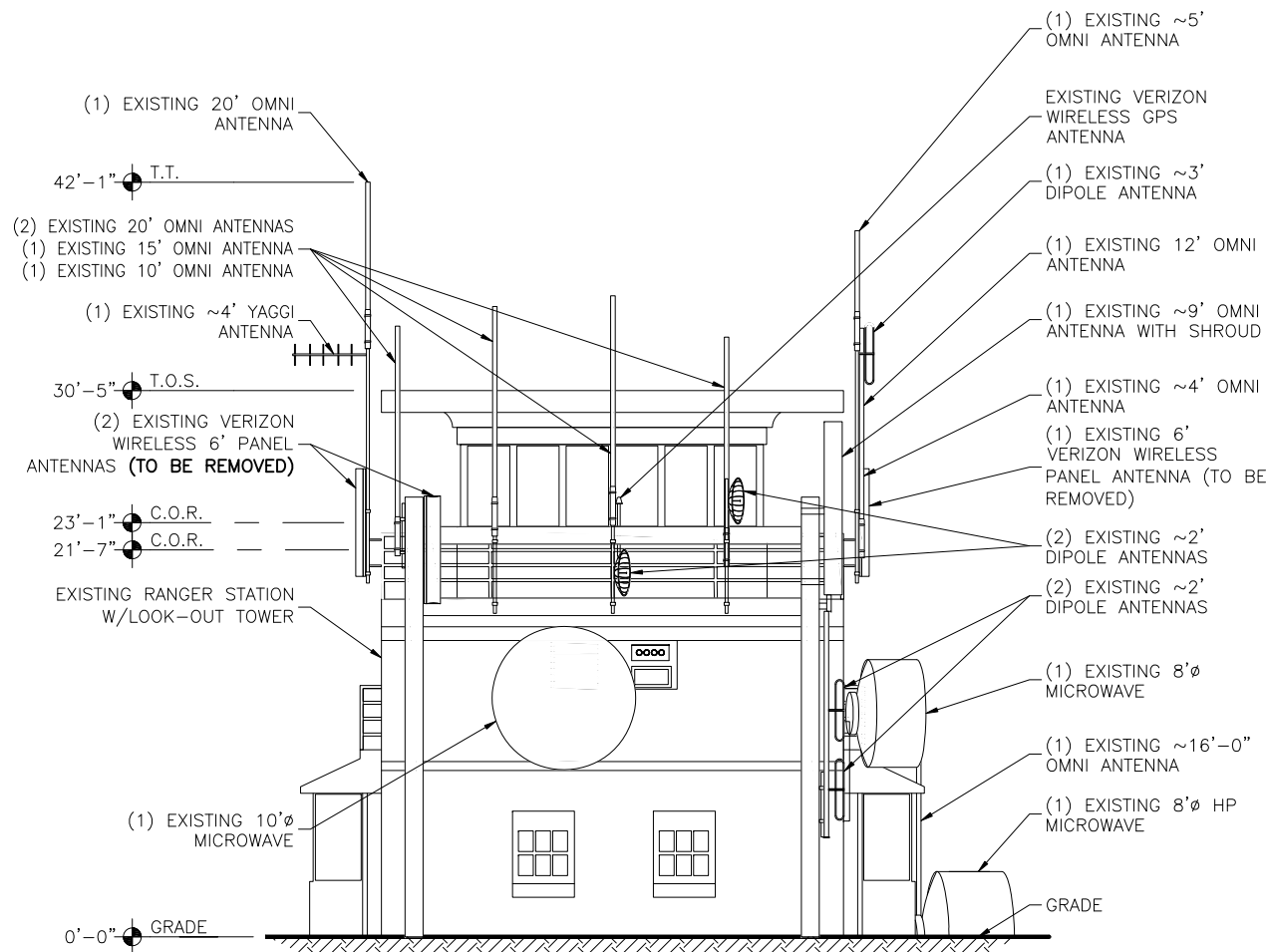
RELOCATION TO PROPOSED CATWALK:

- TWELVE (12) EXISTING OMNI ANTENNAS
- THREE (3) EXISTING DI-POLES
- THREE (3) EXISTING GRID DISHES
- ONE (1) EXISTING GPS ANTENNA

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE


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EXISTING NORTH ELEVATION  
SCALE: N.T.S.

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY -- FOR LEASING & ZONING	05/28/15	EMS	--
B	REVISED PER COMMENTS	06/03/15	EMS	--



**TowerCom**  
**TECHNOLOGIES**

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DESIGNED BY: \_\_\_\_\_

A diagonal oval stamp with the text "PRELIMINARY FOR LEASING/ZONING" inside.

WY1 MOUNT WASHBURN  
PROPOSED 39'-6"  
SELF SUPPORT TOWERS  
EXISTING COMMUNICATIONS SITE

MOUNT WASHBURN  
YELLOWSTONE NATIONAL PARK  
PARK COUNTY, WYOMING

## EXISTING ELEVATIONS

6/3/2015 10:00 AM

Z4

NOTE:

REMOVAL

- THREE (3) EXISTING PANEL ANTENNAS
  - TWO (2) WOOD POLES
- RELOCATION TO PROPOSED CATWALK:
- TWELVE (12) EXISTING OMNI ANTENNAS
  - THREE (3) EXISTING DI-POLES
  - THREE (3) EXISTING GRID DISHES
  - ONE (1) EXISTING GPS ANTENNA

KEY:

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

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HELENA, MONTANA 59601

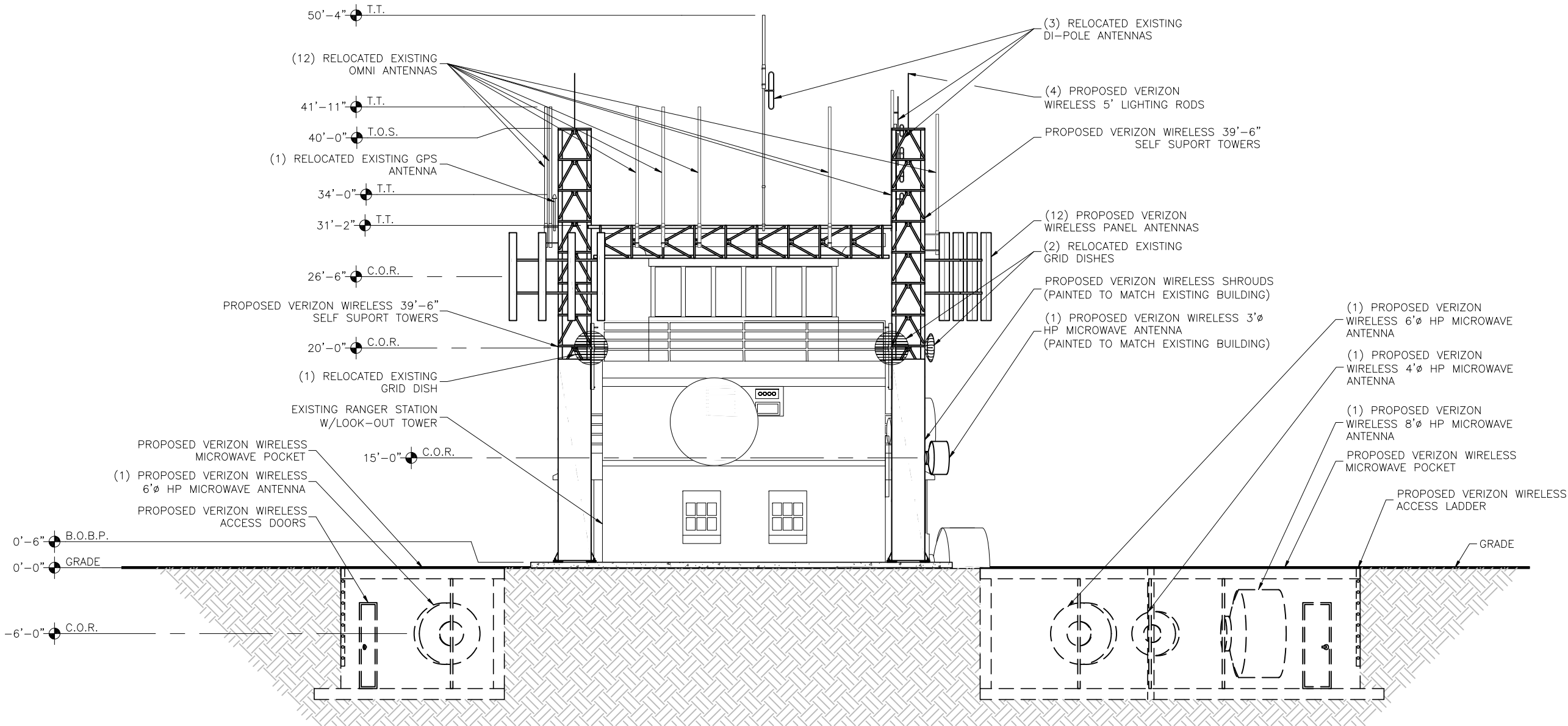
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DESIGNED BY:

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A	PRELIMINARY - FOR LEASING & ZONING	05/28/15	EMS	-
B	REVISED PER COMMENTS	06/03/15	EMS	-



**PROPOSED NORTH ELEVATION**  
SCALE: N.T.S.

PRELIMINARY  
FOR LEASING/ZONING

PROJECT NAME:

**WY1 MOUNT WASHBURN**  
**PROPOSED 39'-6"**  
**SELF SUPPORT TOWERS**  
**EXISTING COMMUNICATIONS SITE**

PROJECT ADDRESS:

**MOUNT WASHBURN**  
**YELLOWSTONE NATIONAL PARK**  
**PARK COUNTY, WYOMING**

SHEET TITLE:

**PROPOSED ELEVATIONS**

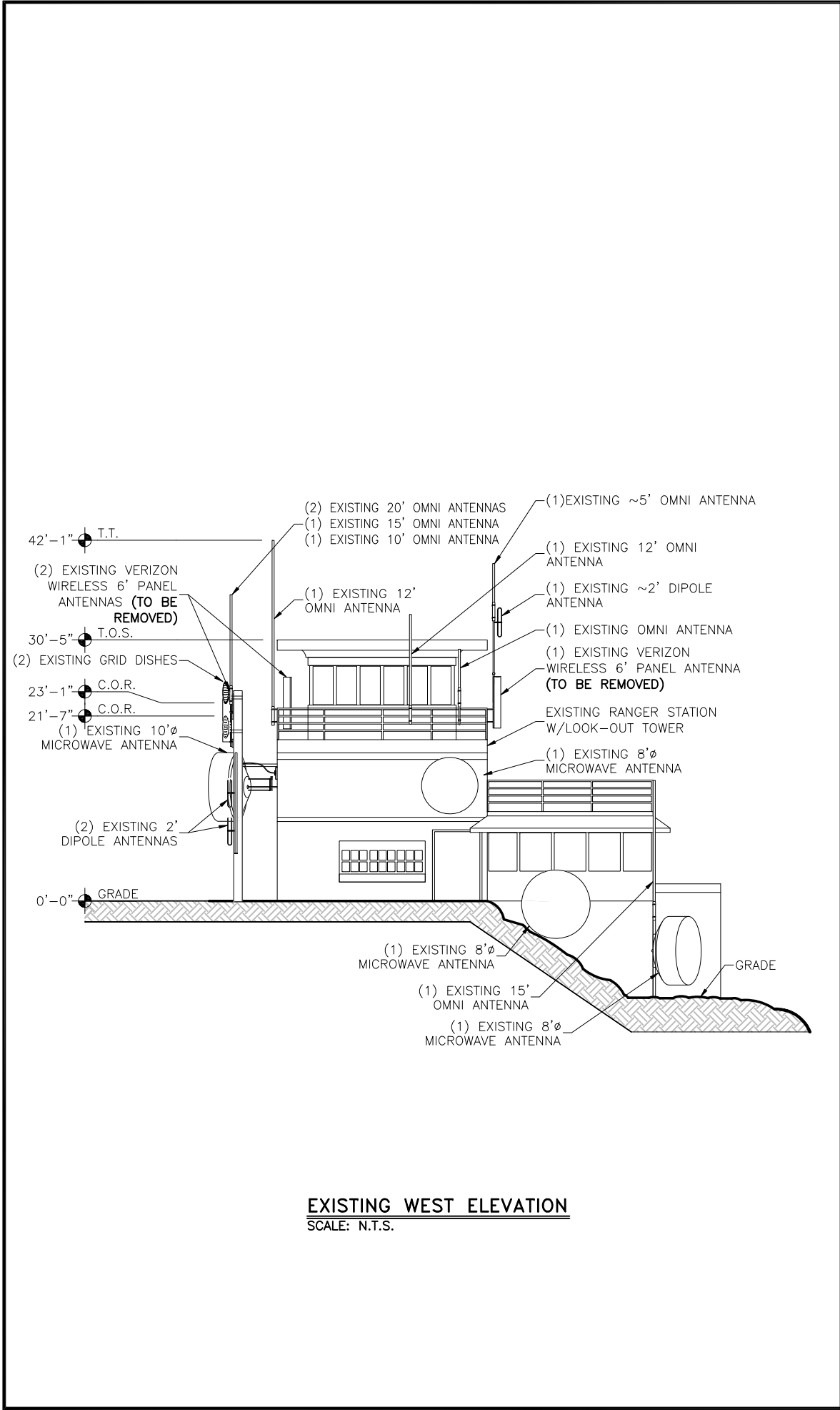
SAVE DATE:

6/3/2015 10:00 AM

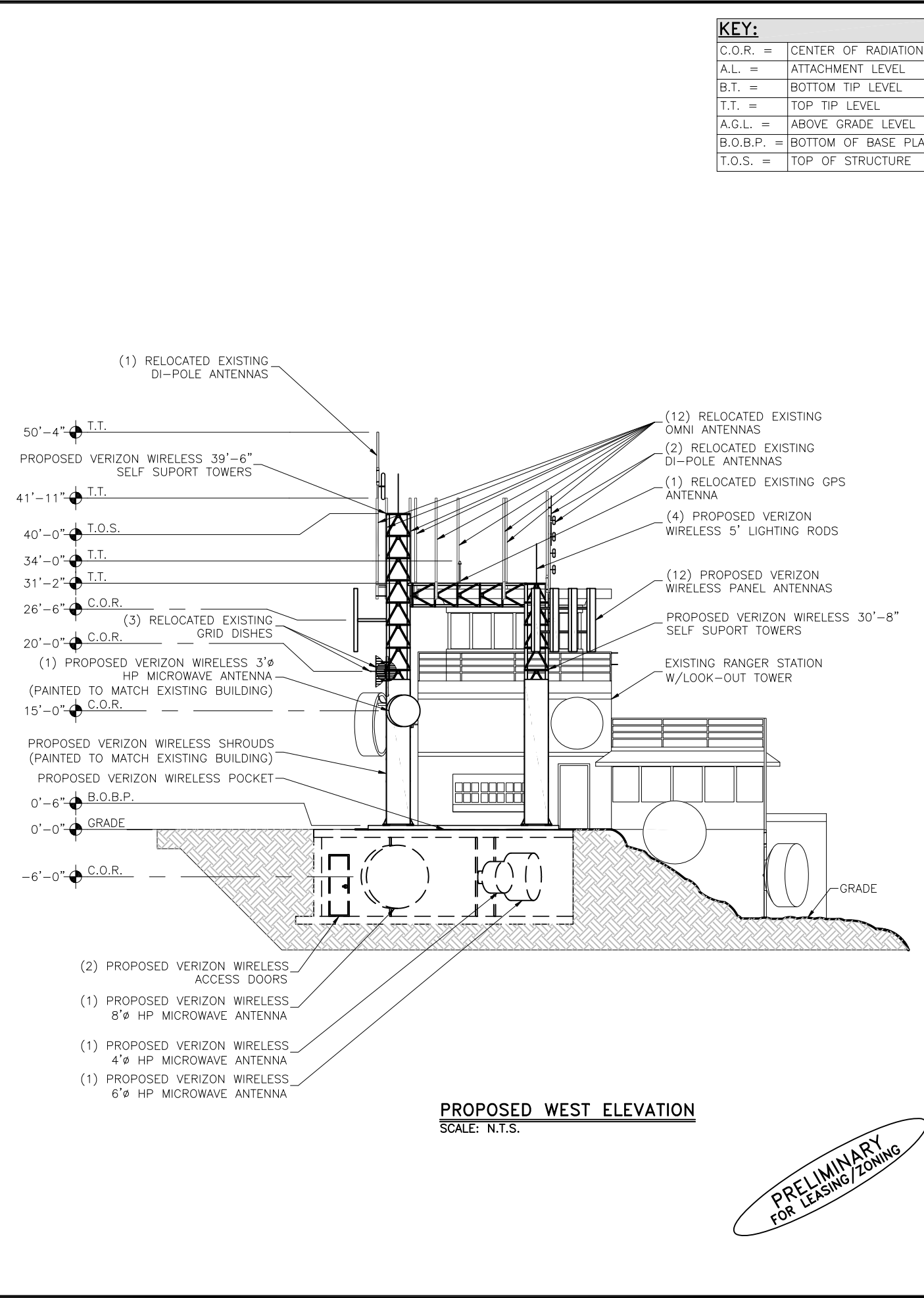
SHEET NUMBER:

**Z5**





**EXISTING WEST ELEVATION**  
SCALE: N.T.S.



**PROPOSED WEST ELEVATION**  
SCALE: N.T.S.

PRELIMINARY  
FOR LEASING/ZONING

KEY:	
C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

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TowerCom Technologies		AZ - CA - CO - ID - NM - NV - TX - UT		CHK	BY	DATE
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YELLOWSTONE NATIONAL PARK  
PARK COUNTY, WYOMING

SHEET TITLE:

ELEVATIONS

SAVE DATE:

6/3/2015 10:00 AM

SHEET NUMBER:

Z6